



City of Edmonds Stormwater Management Program (SWMP) Documentation

For Calendar Year 2011

Permittee Coverage Number: WAR04-5513

**City of Edmonds
121 5th Avenue North
Edmonds, WA 98020**

By

**Jerry Shuster, P.E.
Stormwater Engineering Program Manager**

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1 INTRODUCTION

This document has been prepared in accordance with the *Western Washington Phase II Municipal Stormwater Permit* (Phase II Permit) issued by the Department of Ecology (Ecology) on January 17, 2007. This permit applies to the City of Edmonds beginning February 16, 2007. This permit was amended by Ecology on June 17, 2009. The original end date for this permit was February 15, 2012. Based on the Washington Administrative Code (WAC) Chapter 173-226-220 and action by the Washington State Legislature in 2011, this permit will remain into effect through July 31, 2012, as of the date of this document.

Section S5.A of the Phase II Permit requires each Permittee to develop and implement a Stormwater Management Program (SWMP). The SWMP is a set of actions and activities intended to:

- Reduce the discharge of pollutants from the City's municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP).
- Meet the State's requirements for using all known, available, and reasonable methods of prevention, control, and treatment (AKART).
- Protect water quality.
- Comply with the following components listed in sections S5.C.1 through S5.C.5 of the Phase II Permit:
 - Public Education and Outreach
 - Public Involvement and Participation
 - Illicit Discharge Detection and Elimination
 - Controlling Runoff from New Development, Redevelopment, and Construction Sites
 - Pollution Prevention in Municipal Operations

Section S5.2 of the Phase II Permit requires written documentation of the City of Edmonds' SWMP. Section S9 of the Phase II Permit requires the City of Edmonds to provide Ecology an annual report that summarizes the City's compliance with the Phase II permit. The written documentation of the SWMP is one components of the annual report. The annual report is due on March 31, of each year beginning in 2008. Each annual report covers the SWMP actions and activities for the proceeding calendar year. This SWMP covers the City of Edmonds' Phase II Permit actions and activities for calendar year 2011.

1.1 Stormwater Management in Edmonds

Edmonds has a population of approximately 40,000 and covers approximately 9 square miles of land area. Edmonds is largely a built-out community. The majority of the stormwater runoff from Edmonds eventually drains into Puget Sound with the balance entering the greater Lake

Ballinger watershed that discharges into Lake Washington in Seattle. Edmonds is the oldest incorporated city in Snohomish County. Logger George Brackett founded Edmonds in 1890.

The City of Edmonds is committed to meeting the compliance requirements and deadlines of the Phase II Permit. The stormwater management program in Edmonds is lead by the City's Stormwater Engineering Program Manager in the City's Public Works Department, Engineering Division. The Stormwater Engineering Program Manager works closely with the following:

- Public Works Department
 - Street/Storm Manager and Crew,
 - City Engineer, Engineering Program Manager, and Technicians
 - Recycling Coordinator
- Development Services Department – Planners
- Parks Department - Environmental Education Coordinator.

In the fourth quarter of 2011, the City recruited and hired a new Stormwater Technician in the Engineering Division to expand its stormwater management activities in the following areas: public education and post-construction inspection of stormwater management facilities.

1.2 Document Organization

The remaining section of this document has been organized to follow the sequence of Phase II Permit requirements S5.C.1 through S5.C.5. Permit requirement, current activities, planned activities and due dates for each of the five required elements are presented.

2 STORMWATER MANAGEMENT PLAN ELEMENTS

2.1 Public Education and Outreach

The required elements for a public education and outreach program (Section S5.C.1 of the Phase II permit) are summarized below, followed by a description of the current and planned SWMP activities that meet these requirements.



Seaview Elementary Students Learning About How Stormwater Runoff Can Affect Puget Sound

2.1.1 Permit Requirements

Section S5.C.1.a-c of the Phase II permit lists the following requirements:

- Provide an education and outreach program targeting the following audiences:
 - General public
 - General public, businesses (including home-based and mobile businesses)
 - Homeowners, landscapers, and property managers
 - Engineers, contractors, developers, City staff involved in review of development projects, and City staff involved in land use planning.
- Measure the understanding and adoption of target behaviors for at least one targeted audience in at least one subject area.
- Track and maintain records of public education and outreach activities.

2.1.2 Current Activities

The City currently provides the educational materials and public outreach activities summarized in Table 1. The City of Edmonds has an extensive public education and outreach program. In addition, in 2009 (ahead of the permit schedule) the City sanctioned a survey to measure the understanding of the public's knowledge and practices regarding stormwater quality issues. This study is being used as a baseline for targeting future public education and outreach activities. It will also serve as a baseline for comparison for measuring any change in target behaviors from future public education and outreach activities. The survey will be sanctioned again in 2013 to measure the effects of public education efforts.

The City currently tracks and maintains records of public education and outreach activities. The number of "activities" is tabulated as follows: Each entry in Table 1 is counted as one "activity," except for the following: placing of the "Puget Sound Starts Here" storm drain markers in 2011 that were put down in three separate batches and counted as three separate activities; the three public service announcements at the Cinnebarre Theatre that ran for 2 weeks time were counted as three activities; the charity car wash kit was checked out seven times and counted as seven activities. Also, the letters sent in 2007 were not counted for this year.

Table 1 Current Public Education and Outreach Activities

Educational Material/Activity	Description of Educational Material/Activity	Phase II Permit Sections(s) (and Target Audience)
Brochures, Booklets, Fact Sheets and Other Written Material (hard copies available from Engineering Dept. at City hall , the Parks Dept. or on City Website)		
Stormwater Management Handouts (E72 series)	Walks developers and homeowners through classifying their site and defining the applicable minimum requirements to comply with the recently update stormwater management code.	S5.C.1.a.iii (homeowners) S5.C.1.a.iv (Engineers, contractors, developers, review staff and land use planners)
Where in the World Is Your Watershed? brochure	Brochure describes pollutant sources from lawns and gardens, pet wastes, land clearing and construction activity, and vehicles. It provides a list of actions that citizens can do to protect their watershed.	S5.C.1.a.i (general public) S5.C.1.a.ii (general public) S5.C.1.a.iii (homeowners)
Streamside Landowners Best Management Practices web page	This portion of the City's website discusses leaving stream banks natural, planting native plants and trees, limiting the use of lawn chemicals, proper car washing, and keeping pets out of streams. http://www.edmondswa.gov/services/sustainability/water-conservation/streamside-stewardship.html	S5.C.1.a.i general public S5.C.1.a.ii (general public) S5.C.1.a.iii (homeowners)
Let's Discreetly Discuss Fluffy's Pet Waste brochure	Brochure prepared by the Snohomish County Solid Waste Management Division that outlines best practices for pet waste disposal.	S5.C.1.a.i (general public)

Educational Material/Activity	Description of Educational Material/Activity	Phase II Permit Sections(s) (and Target Audience)
Natural Yard Care booklet	This booklet was prepared by Seattle/King County and Washington State University Extension and is available at Edmonds City Hall.	S5.C.1.a.iii (homeowners)
How to be a Salmon Friendly Gardener brochure	Brochure describes building healthy soil with compost, using natural fertilizers, directing runoff to pervious areas, and protecting shoreline habitat.	S5.C.1.a.i (general public) S5.C.1.a.iii (homeowners)
Safer Alternatives for the Home and Garden fact sheets	Fact sheets prepared by the Washington Toxics Coalition that describes alternatives to common toxic products for control of slugs, aphids, and weeds, and choosing fertilizers. http://watoxics.org/healthy-living/healthy-homes-gardens-1/factsheets	S5.C.1.a.ii (general public) S5.C.1.a.iii (homeowners)
Protecting Water Quality in Urban Runoff	Fact sheet published by USEPA that discusses urbanization's effect on the quality & quantity of stormwater runoff and what can be done to best manage this runoff.	S5.C.1.a.ii (general public) S5.C.1.a.iii (homeowners)
Protecting Washington's Waters from Stormwater Pollution	Eight page environmental education guide that discusses a variety of topic related to stormwater runoff and presents ways to protect receiving water from the detrimental effects of uncontrolled stormwater runoff.	S5.C.1.a.ii (general public) S5.C.1.a.iii (homeowners)
Business mailings	In August 2007, letters discussing best management practices and illegal discharges were mailed to automotive sales (new and used) companies, automotive repair companies, concrete contractors, and food service providers.	S5.C.1.a.ii (businesses)
Self-Guided Interpretive Tours		
Watershed Mystery Tour in Yost Park	Self-guided tour map that provides information on the general impacts of stormwater runoff and the impacts of growth and development http://www.edmondswa.gov/images/COE/Services/Education/discovery-programs/Downloads/WSMT.pdf	S5.C.1.a.i (general public)
Storm drain stenciling	One group in 2011 stenciled 15 storm drains. All participants received Drain Ranger badges. Information regarding storm drain stenciling is provided on the City website http://www.edmondswa.gov/services/sustainability/water-conservation/storm-drain-stenciling.html . Free assistance and stenciling supplies are offered to volunteer groups that apply the stencil.	S5.C.1.a.i (general public)
Storm Drain Markers	The City purchased 1,000 "Puget Sound Starts Here" storm drain markers and installed 700 prioritizing in high pedestrian traffic areas near Puget Sound including downtown Edmonds in 2010 and an additional 150 in 2011. These were put down in three separate "batches."	S5.C.1.a.i (general public)
Classroom Presentations, Curriculum and Activities		
Shared Waters booklet	This booklet is used in elementary schools primarily for salmon education; it also discusses storm drains, hazardous waste disposal, pet waste disposal, washing cars, and landscaping.	S5.C.1.a.i (general public) S5.C.1.a.ii (general public)
Perrinville Creek Cleanup/Runoff Lesson	In April 2011, 4 th and 5 th graders from Seaview Elementary School participated in a "Puget Sound Started here"-themed event of cleaning up a reach of Perrinville Creek and learned the source of the trash was from stormwater runoff with City Staff. All participant received "Drain Ranger" pins for their efforts.	S5.C.1.a.i (general public) S5.C.1.a.ii (general public)

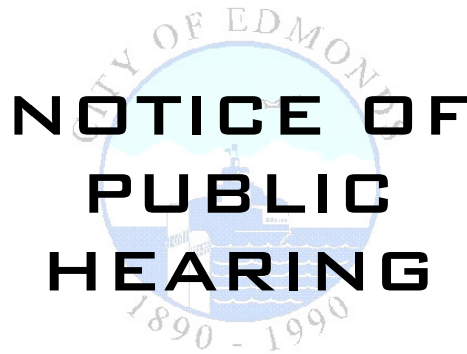
Educational Material/Activity	Description of Educational Material/Activity	Phase II Permit Sections(s) (and Target Audience)
Watershed Fun Fair	This annual event was held May 21, 2011 with the theme “Puget Sound Starts Here” and the featured speaker was Jeff Hogan from “Killer Whale Tales”. Exhibits by public agencies and non-profit organizations included water quality, stormwater, recycling, amphibians, bats, Puget Sound stewardship, and solar power. People enjoyed playing the Pet Waste Toss game which was borrowed from Snohomish County Surface Water Management. Total participation was 150+.	S5.C.1.a.i (general public)
Other		
Screening of Public Service Announcements of Stormwater Education Topics at local Movie Theater	For two weeks beginning in August 2011, three separate public service announcements were broadcast at the Cinnebarre Theater in Mountlake Terrace frequent by Edmonds residents. This was a joint effort by the Cities of Lake Forest Park, Mountlake Terrace, and Edmonds. The announcements were built around the theme that stormwater runoff is not treated prior to discharge to receiving waters and that nothing other than clean rain water should go down the drains.	S5.C.1.a.i (general public)
Mutt Mitt pet waste stations	Scoop and Leash Your Dog signs are posted throughout Edmonds. Mutt Mitt pet waste stations are located at the City dog park.	S5.C.1.a.i (general public)
“Puget Sound Starts Here” Decals on City Vehicles	The City placed 14 in. x 6in. “Puget Sound Starts Here” decals on the 8 vehicles used by the Stormwater group. These vehicles are out on the streets of Edmonds daily for residents to see.	S5.C.1.a.i (general public)
Stormwater Community Research Report	Edmonds sanctioned a survey in 2009 of sample of its residents to measure the public’s knowledge and practices regarding stormwater quality issues. This study will be used as a baseline for targeting future public education and outreach activities. It will also serve as a baseline for comparison for measuring any change in target behaviors from future public education and outreach activities.	S5.C.1.a.iii (homeowners)
Charity car wash kit	Charity car wash kit with car wash runoff control materials is available to organizations that host car washes. The kit is sent out with 30 flyers for participants to give out. The car wash kit was checked out on seven separate occasions in 2011.	S5.C.1.a.ii (general public)

2.1.3 Planned Activities

In 2012 the City plans on continuing all of the public education and outreach activities presented in Table 1 that were implemented in 2011 and adding more content to the City’s new website. Additional public education and outreach activities are planned with People for Puget Sound.

2.2 Public Involvement and Participation

The SWMP requirements for public involvement and participation (Section S5.C.2 of the Phase II permit) are summarized below followed by a description of the current and planned SWMP activities that meet these requirements.



The City of Edmonds provides opportunities for public involvement in its stormwater management program

2.2.1 Permit Requirements

Section S5.C.2.a-b of the Phase II Permit lists the following requirements:

- Create opportunities for the public to participate in the decision-making processes involving the development, implementation, and update of the SWMP.
- Develop and implement a process for consideration of public comments on the SWMP.
- Make the SWMP document and annual report submitted to Ecology available to the public.

2.2.2 Current Activities

In 2011, the City provided several opportunities for public involvement and participation as summarized in Table 2.

Table 2 Current Public Involvement and Participation Opportunities

Date	Stormwater Program Public Involvement and Participation Opportunity	Phase II Permit Section
September 27, 2011 and October 4, 2011	Public Hearings on Capital Improvement Plan that included: 1) stormwater projects to control runoff from redevelopment and construction sites 2) Phase II permit compliance projects.	S5.C.2.b
November 1, 2011	Public Hearing on City budget that included funding for SWMP and City stormwater capital projects.	S5.C.2.b

Date	Stormwater Program Public Involvement and Participation Opportunity	Phase II Permit Section
March 30, 2011	Most current SWMP and Phase II Permit Annual Report posted on City website	S5.C.2.b
On-going	Public is asked to comment on Stormwater Management Plan by soliciting input via the City's website.	S5.C.2.b

SWMP = stormwater management program.

2.2.3 Planned Activities

In 2012, the City will continue implementation of this SWMP. Table 3 outlines the planned activities that offer opportunities for public involvement and participation in the City's stormwater program, and the associated Phase II permit deadlines.

Table 3 Planned Public Involvement and Participation Opportunities

Task ID	Task Description	Phase II Permit Schedule and Section
PI-1	SWMP document for CY 2011 posted on the City website with contact information for the Public to provide comments.	March 31, 2012 Permit section: S5.C.2.a
PI-2	Annual report for 2011 stormwater program activities posted on the City website with contact information for the Public to provide comments.	Permit deadline: March 31, 2012 Permit section: S5.C.2.a
PI-3	Any stormwater-code related issues that require a Public Hearing under Edmonds Community Development Code.	Permit section: S5.C.2

2.3 Illicit Discharge Detection and Elimination

The SWMP requirements for illicit discharge detection and elimination (IDDE) (Section S5.C.3 of the Phase II permit) are summarized below, followed by a description of the current and planned SWMP activities that meet these requirements.



An Illicit Discharge of Paint on Brookmere Drive (discharges to Shell Creek)

2.3.1 Permit Requirements

Section S5.C.3.a-f of the Phase II permit lists the following requirements:

- Develop a storm sewer map.
- Develop and implement an illicit discharge ordinance.
- Develop and implement an ongoing program to detect and address illicit discharges, spills, illicit connections, and illegal dumping.
- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste.
- Adopt and implement procedures for IDDE program evaluation and assessment.

- Provide training to staff on identification and reporting of illegal discharges.

2.3.2 Current Activities

The City has accomplished the IDDE activities summarized in Table 4.

Table 4 Current Illicit Discharge Detection and Elimination Activities

Task	Description of Work	Phase II Permit Section
Storm sewer map	The City has completed a storm sewer map, including tributary conveyances, drainage areas, and land use associated with large outfalls (i.e. outfalls with a pipe diameter of at least 24 inches) and verification of the locations and types of catch basins. This information has been compiled in the City's geographic information system (GIS storm sewer map).	S5.C.3.a
Illicit discharge ordinance	The City had an ordinance prohibiting illegal discharges prior to the effective date of the Phase II Permit. In August 2009, the City Council passed an ordinance that updated the illicit discharge code to be consistent with Ecology's guidance for Phase II Permit compliance.	S5.C.3.b
Illicit Discharge Program	The City has developed and implemented an ongoing program to detect and eliminate illicit discharges that includes the following: <ul style="list-style-type: none"> ▪ Procedures for locating priority areas ▪ Field assessment activities ▪ Discharge characterization procedure ▪ Source tracing procedures ▪ Source removal procedures. 	S5.C.3.c
Receiving Water Prioritization	Developed a prioritized list of water bodies and associated drainage areas for IDDE focus. Completed November 16, 2010.	S5.C.3.c.ii
Field Assessments	Conducted field assessment on three high-priority water bodies in September 2010 and one additional assessment in August 2011.	S5.C.3.c.ii
Distribution of information on hazards associated with illegal discharges and improper disposal of waste	In August 2007, the City mailed out information on best management practices and illegal discharges to food service businesses, auto repair facilities, auto sales businesses, and a concrete contractor that includes the hazards associated with illegal discharges and improper waste disposal. The City also distributes this information to known violators of the Illegal Discharge Code.	S5.C.3.d.i
Public listing for illegal discharge hotline	The City website has information for reporting a spill or illicit discharge at : http://www.edmondswa.gov/government/departments/public-works-home/pw-main-report-a-spill.html .	S5.C.3.d.ii
Procedures for program evaluation and assessment	The City's Stormwater Engineering Program Manager and Public Works Crews respond to incidents, take photos, document the details of the incident and how it was dealt with, and logs this information into the Cartegraph asset management system. This information includes number and type of spills, inspections, and feedback from public education efforts.	S5.C.3.e

Task	Description of Work	Phase II Permit Section
Training of Municipal Staff	Training was conducted for 14 municipal staff members in August 2009 who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges. This training included the “Awareness Level” and “Response and Enforcement” level. Training for all municipal staff that might come in contact with or observe an illicit discharge/connection on the proper procedures for identifying, reporting, and responding to the illicit discharge/connection. Completed September 2 and 15, 2010. One new employee in 2011 was trained in both the “Awareness Level” and “Response and Enforcement” level.	S5.C.3.f.i

GIS = geographic information system.

2.3.3 Planned Activities

The City will continue to implement the activities described in Table 4 throughout the rest of the current Permit term. This will include conducting one field assessment per year in accordance with Permit section: S5.C.3.c.ii

2.4 Controlling Runoff from New Development, Redevelopment, and Construction Sites

The SWMP requirements for controlling runoff from new development, redevelopment, and construction sites (Section S5.C.4 of the Phase II permit) are summarized below, followed by a description of the current and planned SWMP activities that meet these requirements.



Stormwater Detention System for New Auto Parts Store on Highway 99 and 230th St. SW

2.4.1 Permit Requirements

Section S5.C.4.a-f of the Phase II permit lists the following requirements:

- Develop and adopt a new ordinance or ordinance revisions that address runoff from new development, redevelopment, and construction projects in a manner that meets the minimum requirements established by Ecology.
- Adopt a site planning process and selection and design criteria for best management practice (BMPs) that will protect water quality and reduce the discharge of pollutants to the maximum extent practicable.

- Develop an approval process for new development that includes inspections of private stormwater facilities.
- Develop provisions for techniques for low impact development (LID) that take into account site conditions, access, and long-term maintenance.
- Develop and implement a permitting process with plan review, inspection, and enforcement capability for all sites that disturb a land area of 1 acre or more.
- Inspect all construction sites before construction if they exhibit high potential for sediment transport during construction to ensure adequate erosion and sediment control BMPs, and again upon completion of construction to ensure proper installation of permanent stormwater controls.
- Adopt an ordinance or other enforceable mechanism to verify long-term operation and maintenance (O&M) of post-construction facilities and BMPs.
- Establish standards for stormwater facility maintenance that are equivalent to those included in Ecology's Stormwater Management Manual for Western Washington (Ecology 2005).
- Conduct annual inspections of stormwater treatment and flow control facilities permitted by the City; inspect all new flow control and water quality treatment facilities for new residential developments that are part of a larger common plan for development or sale.
- Develop a record-keeping procedure for inspection reports, warning letters, notices of violations, and other enforcement records.
- Provide copies of notice of intent (NOI) letters to representatives of proposed new development and redevelopment projects.
- Train City staff responsible for implementing the program described above, including staff involved with permitting, plan review, construction site inspections, and enforcement.

2.4.2 Current Activities

The City has accomplished the activities listed in Table 5 to control runoff from new development, redevelopment, and construction sites.

Table 5 Current Activities to Control Runoff from New Development, Redevelopment, and Construction Sites

Task	Description of Work	Phase II Permit Section
Ordinance that addresses runoff from new development, redevelopment, and construction projects	The City developed a new ordinance that addresses runoff from new development, redevelopment, and construction projects. This new ordinance was adopted by City Council April 20, 2010 with effective date of June 1, 2010.	S5.C.4.a
Site Planning Process	The new ordinance adopts a site planning process and selection and design criteria for BMP that will protect water quality and reduce the discharge of pollutants to the maximum extent practicable.	S5.C.4.a.ii
Private stormwater facility inspections	The new ordinance reinforces the City's legal authority, through the maintenance inspection program, to inspect private stormwater facilities that discharge to the City's storm sewer system.	S5.C.4.a.iii
Low Impact Development	The City's new ordinance contains provisions for using LID techniques that take into account site conditions, access, and long-term maintenance.	S5.C.4.a.iv
Erosivity Waiver	The new ordinance does not allow construction sites to apply for the Erosivity Waiver.	S5.C.4.a.v S5.C.4.b.vii
Stormwater site plan review	The new City code requires stormwater site plans for all development and construction projects with more than 1 acre of disturbed soils. Plans for these sites, as well as smaller sites, are reviewed by the Engineering Division for compliance.	S5.C.4.b.i
Inspections before clearing and during construction	The City Engineering Division inspects, before clearing (pre-con inspection) and during construction, (TESC inspection) all known development sites that have a high potential for sediment transport.	S5.C.4.b.ii
Inspections during construction	The City Engineering Division inspects all known permitted development sites during construction to verify proper installation and maintenance of erosion and sediment control BMPs.	S5.C.4.b.iii
Inspections upon completion of construction	The City Engineering Division inspects all permitted development sites upon completion of construction to ensure proper installation of permanent stormwater facilities and structural BMPs.	S5.C.4.b.iv
Enforcement strategy	The City Engineering Division has an enforcement strategy to respond to issues of noncompliance.	S5.C.4.b.vi
Review Inspection Recordkeeping	The City reviews the inspection record-keeping system to determine whether 95 percent of sites are inspected.	S5.C.4.b.v
Formal Maintenance Plans	The new code requires formal maintenance plans upon completion of construction for permanent stormwater controls such as stormwater treatment and detention facilities and other structural BMPs.	S5.C.4.c.i
Long-term operation and maintenance ordinance	The new Code specifies ownership, maintenance, repairs, operation, and inspection of private stormwater systems.	S5.C.4.c.i
Maintenance Standards	The new Code specifies maintenance standards as those contained in the Stormwater Management Manual for Western Washington (Ecology 2005).	S5.C.4.c.ii

Task	Description of Work	Phase II Permit Section
Post-Construction Inspections of Stormwater facilities	The City has increased the frequency of stormwater treatment and flow control facility inspections to an annual basis, unless there are maintenance records to justify a different frequency. This includes facilities for new residential developments that are part of a larger common plan of development or sale, every 6 months during the period of heaviest house construction (i.e. 1 to 2 years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards, as needed.	S5.C.4.c.iii S5.C.4.c.iv
Record-keeping	The City uses PermitTrax software to keep records of inspections and enforcement actions by staff related to development projects that require a building permit. For those sites that do not require a building permit, other electronic tracking means are used. In all cases the following are tracked: inspection reports, warning letters, notices of violations, and other enforcement records.	S5.C.4.d
Notice of intent availability	The City Development Services Department has made available copies of the Notice of Intent for Construction Activity and copies of the Notice of Intent for Industrial Activity. For large site projects where a pre-application meeting is needed, these two documents are included in the agenda,	S5.C.4.e
Training	City engineering inspectors have attended formal workshops and training courses regarding erosion and sediment control practices and inspections. Five of the Engineering Staff members are Certified Erosion and Sediment Control Leads (CESL). New inspectors and plan reviewers receive on-the-job training regarding inspection practices, review of erosion and sediment control practices, and review of permanent stormwater facilities.	S5.C.4.f

BMP = best management practice.

TESC = Temporary Erosion and Sediment Control

2.4.3 Planned Activities

The City will continue to implement the activities described in Table 5 throughout the rest of the current Permit term.

2.5 Pollution Prevention and Operation and Maintenance for Municipal Operations

This section summarizes Phase II permit requirements related to pollution prevention and O&M for municipal operations (Section S5.C.5) and describes current and planned SWMP activities related to these requirements.



City Maintenance Crews Emptying Vacor Truck of Catch Basin Waste at Decant Facility

2.5.1 Permit Requirements

Section S5.C.5.a-f of the Phase II permit lists the following requirements:

- Develop maintenance standards for facilities that currently do not have maintenance standards.
- Inspect municipally owned or operated permanent stormwater treatment and flow control facilities (other than catch basins) annually and take appropriate maintenance actions.
- Conduct spot checks of potentially damaged permanent treatment and flow control facilities (other than catch basins) after major (greater than 24-hour, 10-year recurrence interval rainfall) storm events.

- Inspect all catch basins and inlets owned or operated by the City at least once before the end of the Phase II permit term; clean catch basins if necessary.
- Establish and implement practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads, or highways owned or maintained by the City and road maintenance activities conducted by the City.
- Establish and implement policies and procedures to reduce pollutants in discharges from all lands owned and maintained by the City, including parks, open space, road rights-of-way, maintenance yards, and stormwater treatment and flow control facilities.
- Develop and implement an ongoing training program for City employees whose construction, operations, or maintenance job functions may adversely affect stormwater quality.
- Develop and implement a stormwater pollution prevention plan for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the City.
- Maintain records of inspections and maintenance or repair activities.

2.5.2 Current Activities

The City has accomplished the following activities related to pollution prevention and O&M for municipal operations that are listed in Table 6. One new employee joined the Public Works Storm Crew in 2011 and was given the appropriate training for construction and operation and maintenance staff.

Table 6 Current Pollution Prevention and Operation and Maintenance Activities

Task	Description of Work	Phase II Permit Section
Maintenance standards	The City adopted the maintenance standards in the Stormwater Management Manual for Western Washington (Ecology 2005) in 2010.	S5.C.5.a
Annual Inspections	Annual inspections are being conducted of all City-owned stormwater treatment and flow control facilities	S5.C.5.b
Post-storm spot checks	The City storm crew does spot checks of some potentially damaged permanent stormwater treatment and flow control facilities after major storm events. The City conducts repairs to systems immediately if necessary to protect the public health, safety, welfare, or public resources.	S5.C.5.c
Catch basin and inlet inspections	The City has already inspected all of its catch basins and inlets during this permit cycle. The City will continue routine inspections and can typically cover 70 to 100 percent of its catch	S5.C.5.d

Task	Description of Work	Phase II Permit Section
	basins and inlets annually.	
Tracking System	The City has established and implemented a tracking system to for inspection and maintenance related to the Phase II permit requirements. The City uses the Cartegraph asset management for tracking maintenance.	S5.C.5.e
Practices to reduce stormwater impacts from runoff and road maintenance	<p>The City has formalized practices to reduce impacts due to runoff from streets, parking lots, and highways owned or maintained by the City and road maintenance activities conducted by the City for the following activities:</p> <ul style="list-style-type: none"> ▪ Pipe cleaning ▪ Cleaning of culverts that convey stormwater in ditch systems ▪ Ditch maintenance ▪ Street cleaning ▪ Road repair and resurfacing, including pavement grinding ▪ Snow and ice control ▪ Utility installation ▪ Pavement striping maintenance ▪ Maintaining roadside areas, including vegetation management ▪ Dust control. 	S5.C.5.f
Policies and procedures to reduce pollutants in discharges	<p>The City has formally established and implemented policies and procedures to reduce pollutants in discharges from lands owned and maintained by the City for the following activities:</p> <ul style="list-style-type: none"> ▪ Application of fertilizer, pesticides, and herbicides, including the development of nutrient management and integrated pest management plans ▪ Sediment and erosion control ▪ Landscape maintenance and vegetation disposal ▪ Trash management ▪ Building exterior cleaning and maintenance. 	S5.C.5.g
Training	The Public Works Operations team developed and implemented a training program for construction and operation and maintenance staff. All new employees are trained upon hire.	S5.C.5.h

2.5.3 Planned Activities

The City will continue to implement the activities described in Table 6 throughout the rest of the current Permit term.